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(FILE 'HOME' ENTERED AT 13:22:05 ON 14 NOV 2005)

FILE 'REGISTRY' ENTERED AT 13:22:13 ON 14 NOV 2005

L1 STRUCTURE UPLOADED

L2 1 S L1

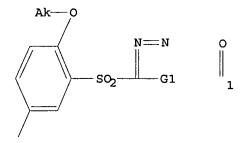
L3 5 S L1 FULL

FILE 'CAPLUS' ENTERED AT 13:23:07 ON 14 NOV 2005

L4 1 S L3

=> d que l4 stat

L1 STR



G1 SO2, [@1]

Structure attributes must be viewed using STN Express query preparation.

L3 5 SEA FILE=REGISTRY SSS FUL L1

L4 1 SEA FILE=CAPLUS ABB=ON PLU=ON L3

=> d ibib iabs hitstr

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:701845 CAPLUS

DOCUMENT NUMBER: 141:233204

TITLE: Novel sulfonyldiazomethanes, photoacid generators,

resist compositions, and patterning process

INVENTOR(S): Ohsawa, Youichi; Kobayashi, Katsuhiro; Yanagi,

Yoshitaka; Maeda, Kazunori

PATENT ASSIGNEE(S): Japan

SOURCE: U.S. Pat. Appl. Publ., 41 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004167322	A1	20040826	US 2004-776159	20040212
JP 2004244360	A2	20040902	JP 2003-35077	20030213
PRIORITY APPLN. INFO.:			JP 2003-35077 A	20030213

OTHER SOURCE(S): MARPAT 141:233204

ABSTRACT:

A chemical amplification type resist composition comprising a specific benzenesulfonyldiazomethane containing a long-chain alkoxyl group at the 2-position on benzene ring has many advantages including improved resolution, improved focus latitude, minimized line width variation or shape degradation even on long-term PED, minimized debris left after coating, development and peeling, and improved pattern profile after development and is thus suited for microfabrication.

TT 746652-33-5P 746652-37-9P 746652-38-0P

746652-39-1P 746652-40-4P

RL: CAT (Catalyst use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(sulfonyldiazomethane photoacid for resist compns.)

RN 746652-33-5 CAPLUS

CN Benzene, 1,1'-[(diazomethylene)disulfonyl]bis[5-(1,1-dimethylethyl)-2-(hexyloxy)- (9CI) (CA INDEX NAME)

RN 746652-37-9 CAPLUS

RN 746652-38-0 CAPLUS
CN Benzene, 1,1'-[(diazomethylene)disulfonyl]bis[5-ethyl-2-(hexyloxy)- (9CI) (CA INDEX NAME)

Me- 
$$(CH_2)_5$$
 - O O CH<sub>2</sub>) 5 - Me

RN 746652-39-1 CAPLUS

CN Benzene, 1,1'-[(diazomethylene)disulfonyl]bis[2-(hexyloxy)-5-(1-methylethyl)- (9CI) (CA INDEX NAME)

$$i-Pr$$

$$0 N_2 0 O-(CH_2)_5-Me$$

$$S-C-S O O$$

$$i-Pr$$

RN 746652-40-4 CAPLUS

CN Benzene, 1,1'-[(diazomethylene)disulfonyl]bis[2-(hexyloxy)-5-(2-methoxyethyl)- (9CI) (CA INDEX NAME)

=> => (	d que	110	stat	<b>.</b>			
L5		19	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"OHSAWA YOUICHI"/AU
L6		55	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"KOBAYASHI KATSUHIRO"/AU
L7		8	SEA	FILE=CAPLUS			"YANAGI YOSHITAKA"/AU
L8		52	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	"MAEDA KAZUNORI"/AU
L9		118	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L5 OR L6 OR L7 OR L8
L10		14	SEA	FILE=CAPLUS	ABB=ON	PLU=ON	L9 AND (?DIAZOMETHANE OR
	DIAZOMETHANE)						

=> d 1-14 bib abs

L10 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:182216 CAPLUS

DN 142:287807

TI Novel sulfonyldiazomethane compounds, photoacid generator, resist materials and patterning process using the same

IN Kobayashi, Katsuhiro; Ohsawa, Youichi; Kinsho, Takeshi; Fukuda, Eiji; Tanaka, Shigeo

PA Shin-Etsu Chemical Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 34 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2005048395	A1	20050303	US 2004-929059	20040827
	JP 2005068117	A2	20050317	JP 2003-304060	20030828
PRAI	JP 2003-304060	Α	20030828		
os	MARPAT 142:287807				
GI					

$$\begin{bmatrix} & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

AB Provided are sulfonyldiazomethane compds. and photoacid generators suited for resist materials which generate less foreign matters after application, development and peeling, and in particular, are excellent in the pattern profile after the development; and resist materials and patterning process using them. Provided are sulfonyldiazomethane compds. represented by formula I(R1 = H, C1-6 alkyl; Cy = cyclohexyl, C1-6 alkyl, C1-6 alkoxy; R2 = C1-10 alkyl, C6-14 aryl; p = 1, 2; q = 0, 1; p+q=2). Also provides are photoacid generators containing the sulfonyldiazomethane compds., and a chemical amplification resist material comprising (A) a resin which changes its solubility in an alkali developer by action of an acid, and (B) a sulfonyldiazomethane compound of formula I capable of generating an acid by exposure to radiation. Provided is a patterning process comprising steps of applying the above-described resist material onto a substrate to form a coating process, heating the coating process, exposing the coating process, and developing the exposed coating process in a developer after an optional heat treatment.

- L10 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:701845 CAPLUS
- DN 141:233204
- TI Novel sulfonyldiazomethanes, photoacid generators, resist compositions, and patterning process
- IN Ohsawa, Youichi; Kobayashi, Katsuhiro; Yanagi, Yoshitaka; Maeda, Kazunori
- PA Japan
- SO U.S. Pat. Appl. Publ., 41 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.		DATE	APPLICATION NO.	DATE
PI	US 2004167322	A1	20040826	US 2004-776159	20040212
	JP 2004244360	A2	20040902	JP 2003-35077	20030213
PRAI	JP 2003-35077	Α	20030213		

OS MARPAT 141:233204

AB A chemical amplification type resist composition comprising a specific benzenesulfonyldiazomethane containing a long-chain alkoxyl group at the 2-position on benzene ring has many advantages including improved resolution, improved focus latitude, minimized line width variation or shape degradation even on long-term PED, minimized debris left after coating, development and peeling, and improved pattern profile after development and is thus suited for microfabrication.

- L10 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:701689 CAPLUS
- DN 141:233196
- TI Sulfonyldiazomethanes for photoacid generators and resist patterning process
- IN Ohsawa, Youichi; Kobayashi, Katsuhiro; Yanagi, Yoshitaka; Maeda, Kazunori
- PA Japan
- SO U.S. Pat. Appl. Publ., 38 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004166432	A1	20040826	US 2004-776291	20040212
JP 2004244358	A2	20040902	JP 2003-35055	20030213
PRAI JP 2003-35055	Α	20030213		

OS MARPAT 141:233196

AB A chemical amplification type resist composition comprising a specific sulfonyldiazomethane containing long-chain alkoxyl groups has many advantages including improved resolution, improved focus latitude, minimized line width variation or shape degradation even on long-term PED, minimized debris left after coating, development and peeling, and improved pattern profile after development and is thus suited for microfabrication.

- L10 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:142669 CAPLUS
- DN 140:207466
- TI Photoacid generators, chemically amplified positive resist compositions, and patterning process
- IN Maeda, Kazunori; Ohsawa, Youichi; Watanabe, Satoshi
- PA Japan
- SO U.S. Pat. Appl. Publ., 30 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

	01.1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PΙ	US 2004033440	A1	20040219	US 2003-636654	20030808
	JP 2004133393	A2	20040430	JP 2003-205698	20030804
PRAI	JP 2002-233510	A	20020809		

OS MARPAT 140:207466

AB Photoacid generators capable of generating 2,4,6-triisopropylbenzenesulfonic acid upon exposure to actinic radiation are suited for use in chemical amplified pos. resist compns. Due to the low diffusion of 2,4,6-triisopropylbenzenesulfonic acid, the compns. have many advantages including improved resolution, improved focus latitude, and minimized line width variation or shape degradation even on long-term PED.

- L10 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:142668 CAPLUS
- DN 140:207465
- TI Novel sulfonydiazomethanes, photoacid generators, resist compositions, and patterning process
- IN Ohsawa, Youichi; Watanabe, Satoshi; Maeda, Kazunori
- PA Japan
- SO U.S. Pat. Appl. Publ., 31 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

1711.0111 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004033432	A1	20040219	US 2003-636541	20030808
JP 2004075542	A2	20040311	JP 2002-233523	20020809
PRAI JP 2002-233523	Α	20020809		

OS MARPAT 140:207465

AB Sulfonyldiazomethane compds. containing a long-chain alkyl- or alkoxy-naphthyl group are novel and useful as photoacid generators. Chemical amplification type resist compns. comprising the same are suited for microfabrication because of many advantages including improved resolution, improved focus latitude, and minimized line width variation or shape degradation even on long-term PED.

- L10 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:20123 CAPLUS
- DN 140:102018
- TI Photoacid generators for chemically amplified resists and their use in resists and pattern formation
- IN Osawa, Yoichi; Kobayashi, Katsuhiro; Takemura, Katsuya;
   Tsuchiya, Junji; Maeda, Kazuki
- PA Shin-Etsu Chemical Industry Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 76 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese
- FAN.CNT 1

T. LTIA.	CNII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2004004551	A2	20040108	JP 2003-27861	20030205
PRAI	JP 2002-80566	Α	20020322		
os	MARPAT 140:102018				
GI					

- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- The photoacid generators are represented by I, pC(EWG):NOSO2C6H4rR'rOn(CH2)mMe, q[C(EWG):NOSO2C6H4-rR'rOn(CH2)mMe]2, or II [R' = H, F, C1-4 alkyl, alkoxy; R = Cl, R'; n = 0, 1; m = 3-11; r = 0-4; EWG = cyano, nitro, C1-3 perfluoroalkyl; p = C1-10 alkyl, C6-12 aryl; q = C1-10alkylene, C6-18 arylene; G', G'' = S, CH:CH; G' and G'' are not S at the same time; G = H, p; two G may form ring]. Alternatively, the photoacid generators are O-arylsulfonyloximes and generate long-chain alkylbenzenesulfonic acids or alkoxybenzenesulfonic acids of  $HO3SC6H4-rR'rOn(CH2)\,mMe$  (R', n, m, and r are same as above) under irradiation with UV, far-UV, electron beam, x-ray, excimer laser,  $\gamma$ -ray, or synchrotron radiation. The claimed chemical amplified (pos.) resists contain the above photoacid generators and resins changing solubility to alkali development solns. by acids. Patterns are formed by applying the resists on substrates, heating, exposing through photomasks by ≤300 nm-wavelength high-energy beams or electron beams, optionally heating, and developing with solns.

- L10 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2003:950589 CAPLUS
- DN 140:21274
- TI Novel sulfonyldiazomethanes, photoacid generators, resist compositions, and patterning process
- IN Kobayashi, Katsuhiro; Ohsawa, Youichi; Hasegawa, Koji; Yoshihara, Takao; Maeda, Kazunori; Fujii, Toshihiko
- PA Shin-Etsu Chemical Co., Ltd., Japan
- SO U.S. Pat. Appl. Publ., 35 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2003224298	A1	20031204	US 2003-426623	20030501
US 6713612	B2	20040330		
JP 2004026809	A2	20040129	JP 2003-118155	20030423
PRAI JP 2002-129681	Α	20020501		
00 1/20020 1/0 0100/				

OS MARPAT 140:21274

AB Sulfonyldiazomethane compds. containing a long-chain alkylcyclohexyl group are novel and useful as photoacid generators. Chemical amplification type photoresist compns. comprising the same are suited for microfabrication because of many advantages including improved resolution, improved focus latitude, minimized line width variation or shape degradation even on long-term PED, minimized debris left after coating, development and peeling, and improved pattern profile after development.

- L10 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2003:912695 CAPLUS
- DN 139:401547
- TI Photoacid generators and chemically amplified resist compositions for patterning process
- IN Ohsawa, Youichi; Kobayashi, Katsuhiro; Takemura, Katsuya; Tsuchiya, Junji; Maeda, Kazunori
- PA Shin-Etsu Chemical Co., Ltd., Japan
- SO U.S. Pat. Appl. Publ., 49 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

FAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003215738	A1	20031120	US 2003-393006	20030321
	US 6916591	B2	20050712		
	JP 2004004614	A2	20040108	JP 2003-71473	20030317
PRAI	JP 2002-80649	Α	20020322		
os	MARPAT 139:401547				
GI					

AB Photoacid generators are provided by O-arylsulfonyl-oxime compds. having general formula I (R = H, F, Cl, NO2, alkyl, alkoxy; n = 0, 1; m = 1, 2; r = 0-4; rl = 0-5; k = 0-4; Gl, Gl = l = l - l Chemical amplified resist compns. comprising the photoacid generators have many advantages including improved resolution, improved focus latitude, minimized line width variation or shape degradation even on long-term PED, and improved pattern profile after development. Because of high resolution, the compns. are suited for microfabrication, especially by deep UV lithog.

L10 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:711621 CAPLUS

DN 139:252510

TI N-Solfonyloxydicarboxyimide compounds for use as photo acid-generator in chemically amplified photoresists

IN Osawa, Yoichi; Kobayashi, Katsuhiro; Maeda, Kazunori;
Miyakoshi, Hiroshi; Tanaka, Yoshio

PA Shin-Etsu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 41 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

I'M' . CIT	-				
PAT	ENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP	2003252855	A2	20030910	JP 2002-364254	20021216
PRAI JP	2001-393194	Α	20011226		
OS MAR	PAT 139:252510				
GI					

Ι

AB N-Solfonyloxydicarboxyimide compds. having general structure I is claimed to be used as photo acid-generator in chemical amplified photoresists (R = H, F, NO2, alkyl, alkoxy; n = 0, 1; m = 1, 2; r = 0-4, r' = 0-5; G = single or double bond; p, q = H, alkyl, or form alicyclic ring, heterocyclic ring, or aromatic ring). A chemical amplified photoresist containing the acid generator

is also claimed.

- L10 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2003:525404 CAPLUS
- DN 139:92748
- TI Novel sulfonyldiazomethane compounds, photoacid generators, photoresists therewith, and photolithography employing the same
- IN Osawa, Yoichi; Kobayashi, Katsuhiro; Maeda, Kazuki
- PA Shin-Etsu Chemical Industry Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 51 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003192665	A2	20030709	JP 2002-275029	20020920
	US 2003180653	A1	20030925	US 2002-255770	20020927
	US 6689530	B2	20040210		
PRAI	JP 2001-300345	Α	20010928		

OS MARPAT 139:92748

AB The compds. are [[Me(CH2)mOn]RkC6H5-n-kSO2]pC:N2(GR3)q [R = H, C1-4 alkyl(oxy); G = SO2, CO; R3 = C1-10 alkyl, C6-14 aryl; p = 1, 2; q = 0, 1; p + q = 2; n = 0, 1; m = 3-11; k = 0-4]. Photoresists containing acid-labile alkali-developable resins and radiation-sensitive acid generators including the compds. are also claimed. Further claimed is photolithog. wherein the photoresists are applied on substrates, annealed, exposed to ≤300-nm actinic rays or electron beams, (annealed,) and developed. The photoresists produce patterns containing min. number of foreign matter and having sharp profile.

- L10 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2001:817219 CAPLUS
- DN 135:350570
- TI Chemically amplified positive resist compositions with improved resolution, pattern profile and focal latitude for deep UV lithography
- IN Ohsawa, Youichi; Watanabe, Jun; Takeda, Takanobu; Seki, Akihiro
- PA Shin-Etsu Chemical Co., Ltd., Japan
- SO U.S. Pat. Appl. Publ., 33 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

	0111 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2001038971	A1	20011108	US 2001-799052	20010306
	US 6682869	B2	20040127		
	JP 2001324813	A2	20011122	JP 2001-57719	20010302
	TW 538312	В	20030621	TW 2001-90105205	20010306
PRAI	JP 2000-61350	A	20000307		

AB A chemical amplified, pos. resist composition is provided comprising (A) a photoacid generator and (B) a resin which changes its solubility in an alkali developer under the action of acid and has substituents of the formula: Ph-(CH2)nOCH(CH2CH3)- (n = 0,1). The composition has many advantages including improved focal latitude, improved resolution, minimized line width variation or shape degradation even on long-term PED, minimized defect left after coating, development and stripping, and improved pattern profile after development and is suited for microfabrication by any lithog., especially deep UV lithog.

- L10 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2001:781404 CAPLUS
- DN 135:336907
- TI Chemically amplified positive resist compositions with improved resolution, pattern profile and focal latitude for deep UV lithography
- IN Ohsawa, Youichi; Watanabe, Jun; Takeda, Takanobu; Seki, Akihiro
- PA Shi-Etsu Chemical Co., Ltd., Japan
- SO U.S. Pat. Appl. Publ., 34 pp. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2001033994	A1	20011025	US 2001-799009	20010306
	US 6838224	B2	20050104		
	JP 2001324812	A2	20011122	JP 2001-57716	20010302
	TW 587086	В	20040511	TW 2001-90105203	20010306
PRAI	JP 2000-61357	Α	20000307		

AB A chemical amplified, pos. resist composition is provided comprising (A) a photoacid generator and (B) a resin which changes its solubility in an alkali developer under the action of acid and has substituents of the formula: C6H11 - (CH2)nOCH(CH2CH3) - wherein C6H11 is cyclohexyl and n = 0,1. The composition has many advantages including improved focal latitude, improved resolution, minimized line width variation or shape degradation even on long-term

PED, minimized defect left after coating, development and stripping, and improved pattern profile after development and is suited for microfabrication by any lithog., especially deep UV lithog.

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L10 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2001:336588 CAPLUS
- DN 134:346467
- TI Resist materials containing sulfonyldiazomethane photoacid generators and pattern formation using them
- IN Maeda, Kazunori; Nagata, Takashi; Watanabe, Satoshi; Osawa, Yoichi; Watanabe, Atsushi; Nakura, Shigehiro
- PA Shin-Etsu Chemical Industry Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 51 pp. CODEN: JKXXAF
- DT Patent
- LA Japanese
- FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001125258	A2	20010511	JP 2000-245566	20000814
US 6338931	B1	20020115	US 2000-637595	20000815
PRAI JP 1999-230143	A	19990816		

OS MARPAT 134:346467

The materials contain [(R1SO3)qR2pC6H5-p-qSO2]nC:N2(GR3)m or R1S(:O)2O-1,4-C6H4SO2C(:N2)SO2-1,4-C6H4OSO2R1 [R1, R3 = C1-10 normal, branched, or cyclic (un)substituted alkyl, C6-14 (un)substituted aryl; R2 = C1-6 normal, branched, or cyclic alkyl; G = SO2, CO; p = 0-4; q = 1-5; p + q = 1-5; n = 1, 2; m = 0, 1; n + n = 2] as photoacid generators. Patterns are formed by applying the resist materials on substrates, heating, exposing to  $\leq 300$ -nm high-energy beam or electron beam through photomasks, optionally heating, and developing. The resist materials show good PED (post exposure delay) stability, high resolution, and good focus latitude and are useful for far-UV lithog.

L10 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2001:133716 CAPLUS

DN 134:200517

TI Novel onium salts as photoacid generators for resist compositions and patterning process

IN Ohsawa, Youichi; Watanabe, Jun; Kusaki, Wataru; Watanabe, Satoshi; Nagata, Takeshi; Nagura, Shigehiro

PA Shin-Etsu Chemical Co., Ltd., Japan

SO Eur. Pat. Appl., 77 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PAN.CNI I						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	EP 1077391	A1	20010221	EP 2000-306997	20000816	
	R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,	
	IE, SI, LT,	LV, FI	, RO			
	JP 2001122850	A2	20010508	JP 2000-245564	20000814	
	US 6440634	B1	20020827	US 2000-637363	20000815	
	TW 536549	В	20030611	TW 2000-89116464	20000815	
PRAI	JP 1999-230122	Α	19990816			
	JP 1999-230126	Α	19990816			
os	MARPAT 134:200517					
GI						

$$R^{2}q$$
 $SO_{3}$ -  $(R^{3})$  aM+

AB Disclosed is a chemical amplification type resist composition that comprises as a

photoacid generator novel onium salts of the formula I (R1 = C1-10 alkyl, C6-14 aryl; R2 = H, C1-6 alkyl; p = 1-5, q = 0-4, p+q = 5; R3 = C1-10 alkyl, C6-14 aryl; M = S, I; a = 3 when M=S, 2 when M=I). The chemical amplification type resist comprising the onium salt as a photoacid generator is suited for microfabrication, especially by deep UV lithog. and has many advantages including improved resolution, minimized line width variation or shape degradation even on long-term post-exposure delay, minimized defect after coating, development and stripping, and improved pattern profile after development.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

## => d his full

(FILE 'HOME' ENTERED AT 13:22:05 ON 14 NOV 2005)

FILE 'REGISTRY' ENTERED AT 13:22:13 ON 14 NOV 2005 L1 STRUCTURE UPLOADED L2 1 SEA SSS SAM L1 D SCAN 5 SEA SSS FUL L1 1.3 FILE 'CAPLUS' ENTERED AT 13:23:07 ON 14 NOV 2005 L4 1 SEA ABB=ON PLU=ON L3 D QUE L4 STAT D IBIB IABS HITSTR E OHSAWA YOUICHI/AU L5 19 SEA ABB=ON PLU=ON "OHSAWA YOUICHI"/AU E KOBAYASHI KATSUHIRO/AU

55 SEA ABB=ON PLU=ON "KOBAYASHI KATSUHIRO"/AU L6 E YANAGI YOSHITAKA/AU

8 SEA ABB=ON PLU=ON "YANAGI YOSHITAKA"/AU L7 E MAEDA KAZUNORI/AU

L8 52 SEA ABB=ON PLU=ON "MAEDA KAZUNORI"/AU L9

118 SEA ABB=ON PLU=ON L5 OR L6 OR L7 OR L8
14 SEA ABB=ON PLU=ON L9 AND (?DIAZOMETHANE OR DIAZOMETHANE) L10D QUE L10 STAT

D 1-14 BIB ABS

## FILE HOME

## FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 NOV 2005 HIGHEST RN 867336-65-0 DICTIONARY FILE UPDATES: 13 NOV 2005 HIGHEST RN 867336-65-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*\*\*\*\*\*\*\*\*\* \* The CA roles and document type information have been removed from \* the IDE default display format and the ED field has been added, \* effective March 20, 2005. A new display format, IDERL, is now available and contains the CA role and document type information. \*

\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/reqprops.html

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